

DEPARTMENT OF TRANSPORTATION

DIVISION OF ENGINEERING SERVICES

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch
690 Walnut Ave.St. 150
Vallejo, CA 94592-1133
(707) 649-5453
(707) 649-5493

Contract #: 04-0120F4Cty: SF/ALA Rte: 80 PM: 13.2/13.9File #: 1.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-025250**Date Inspected:** 19-Jul-2011**Project Name:** SAS Superstructure**OSM Arrival Time:** 700**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 1530**Contractor:** American Bridge/Fluor Enterprises, a JV**Location:** Job Site

CWI Name:	Mike Johnson		
Inspected CWI report:	Yes	No	N/A
Electrode to specification:	Yes	No	N/A
Qualified Welders:	Yes	No	N/A
Approved Drawings:	Yes	No	N/A

CWI Present:	Yes	No
Rod Oven in Use:	Yes	No N/A
Weld Procedures Followed:	Yes	No N/A
Verified Joint Fit-up:	Yes	No N/A
Approved WPS:	Yes	No N/A
Delayed / Cancelled:	Yes	No N/A
Component:	SAS Tower	

Bridge No: 34-0006**Summary of Items Observed:**

Caltrans Office of Structural Material (OSM) Quality Assurance Inspector (QAI) Joselito Lizardo was present at the Self Anchored Suspension (SAS) job site as requested to perform observations on the welding of components for the San Francisco Oakland Bay Bridge (SFOBB) Project.

At Tower Base Elevation 13Meters Shear Plate Electro Slag Welding (ESW);

This QA was present at the Tower Base to observe the Electro Slag Welding of the weld number N-041 located at 'N' position per ABF weld map. The weld joint to be welded is a 60mm shear plate to 60mm Tower skin plate 'E' T-joint at corner 'D' and 'E' of Tower North Shaft. ABF intends to implement Caltrans approved welding procedure ABF-WPS-ESW-120T in performing the ESW.

Upon QA's arrival, ABF personnel were noted preparing to weld the shear plate T-joint by checking all the necessary electrical and water hose weld shoe cooling connections are all in place prior to commence ESW. It was noted that three weld shoes were in position at each opposing side of the joint and so with the consumable guide tube that was placed in between the joint gap which was separated by consumable ceramic insulators. Other ABF personnel that were noted assisting the preparation of the ESW include ABF Senior Field Engineer Daniel Hester.

The fit up alignment was previously checked by ABF QC Jesse Cayabyab and this QA. The root gap was measured from bottom to top and the result noted was 18.4mm minimum and 24.2mm maximum which deemed in compliance to the WPS.

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At 1240hours, ABF Operations Superintendent Dan Ieraci and ABF QC Mike Johnson performed the check list verification and noted it was all OK.

Since all the ABF personnel that are involved in the ESW operation are already familiar with their roles during welding, ABF Superintendent Dan Ieraci did not call for the usual pre-meeting prior welding but reminded ABF personnel through the radio to be wary in performing their usual respective tasks.

Initial firing of the ESW has started at 1410 hours but this was considered false start due to one filler wire was not moving and got stuck somewhere inside the consumable guide tube. ABF personnel momentarily stopped the operation and fixed the filler wire issue. After fixing and checking the filler wire, ABF has re-started the ESW at 1421hours but again it was a false start due to same problem. ABF personnel tried again to fix the issue until 1500hours when ABF Superintendent Dan Ieraci has decided to abort the operation and informed his personnel to perform the ESW tomorrow.

Summary of Conversations:

No significant conversation occurred today.

Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact SMR Nina Choy 510-385-5910, who represents the Office of Structural Materials for your project.

Inspected By:	Lizardo, Joselito	Quality Assurance Inspector
Reviewed By:	Levell, Bill	QA Reviewer
